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a) culturing a steril explant of said phytopharmaceutical plant on an induction medium comprising one or more plant growth regulators having cytokinin activity, to form regenerated tissue; and

b) transferring said regenerated tissue to a basal medium and culturing to form plantlets.

#### REMARKS

The above preliminary amendment is made to make minor editorial corrections and to remove multiple dependencies from claims 5, 7, 11, 12, 19, 26, 33 and 47.

A new abstract page is supplied to conform to that appearing on the publication page of the WIPO application, but the new Abstract is typed on a separate page as required by U.S. practice.

Applicants respectfully request that the preliminary amendment described herein be entered into the record prior to calculation of the filing fee and prior to examination and consideration of the above-identified application.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Gregory A. Sebald (Reg. No. 33,280), at (612) 336.4728.

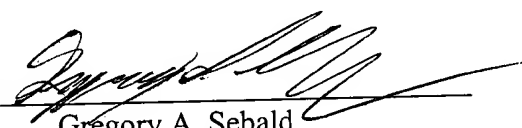
Respectfully submitted,

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## MARKED-UP COPY

5. (Amended) The method [of any one of claims 1 to 4] according to claim 1, wherein said phytopharmaceutical plant is selected from the group consisting of:

*Achillea millefolium*

*Achyranthes bidentata*

*Aconitum napellus*

*Adonis aestivalis*

*Agastache mexicana*

*Agrimonia eupatoria*

*Agathosma betulina*

*Allium* sp

*Anchusa officinalis*

*Anemopsis californica*

*Angelica dahurica*

*Angelica polymorpha sinensis* (*A. sinensis*)

*Arnica Montana*

*Ammi visnaga*

*Arctostaphylos uva-ursi*

*Asclepias tuberosa*

*Astragalus membranaceus*

*Astragalus chinensis*

*Baphicacanthus cusia*

*Bixa orellana*

Bupleurum falcatum  
Brugmansia (Datura) spp.  
Campanula rapunculus  
Carum roxburgianum  
Carum copticum  
Cassia tora  
Chamaelirium luteum  
Chimaphila umbellata  
Commiphora africana  
Conium maculatum  
Crithium maritimum  
Datura metel (Datura alba)  
Datura inoxia  
Dracocephalum moldavica  
Echinacea sp.  
Eclipta alba (E. prostrata)  
Ephedra nevadensis  
Eriodictyon californicum  
Eucommia ulmoides  
Eupatorium perfoliatum  
Filipendula vulgaris (F. hexapetala)  
Gaultheria procumbens  
Geum urbanum



Rauvolfia serpentina

Rivea corymbosa

Sanguinaria Canadensis

Satureja douglasii

Schizonepeta tenuifolia

Scutellaria baicalensis

Solanum xanthocarpum (S. surattense)

Sutherlandia frutescens

Tabebuia impetiginosa

Tribulus terrestris

Trichosanthes kirilowii

Turnera diffusa

Voacanga africana, and

Withania somnifera

7. (Amended) The method according to [any one of claims 1 to 6] claim 1, wherein said at one plant growth regulator having cytokinin activity is selected from the group consisting of thidiazuron (TDZ, *N*-phenyl-*N'*-(1,2,3-thidiazol-yl)urea), benzylaminopurine (BAP), zeatin, CPPU (N-(2-chloro-4pyridyl)-N(-phenyl urea) and 2-*I*-P (N6-(2-isopentenyl) adenine or 6-gamma, gamma-dimethylallylamino purine).

11. (Amended) The method according to [any one of claims 1 to 10] claim 1, wherein said explant is selected from the seed, petiole, hypocotyl, stem, cotyledon and leaf.

12. (Amended) The method according to [any one of claims 1 to 10] claim 1, wherein said phytopharmaceutical plant is St. John's wort.

19. (Amended) The method according to [any one of claims 1 to 4] claim 1, wherein the phytopharmaceutical plant is *Echinacea sp.*.

[24] 26. (Amended) The method according to [any one of claims 1 to 4] claim 1, where said phytopharmaceutical plant is Huang qin.

33. (Amended) The method according to [any one of claims 1 to 4] claim 1, wherein the phytopharmaceutical plant is feverfew.

[44] 43. (Amended) The method according to claim 2, wherein, in said transferring step, said regenerated tissue is subcultured for about 1 to about 15 days.

[45] 44. (Amended) A method for phytofortification of an *in vitro*-grown phytopharmaceutical plant comprising:

- a) culturing a sterile seedling, explant or regenerated tissues to form a plantlet; and
- b) subculturing said plantlet onto a basal medium containing at least one additive of interest, to allow uptake and accumulation of said at least one additive of interest in a bio-available form in said plantlet.

[46] 45. (Amended) The method according to claim [45] 44, wherein, in said step of culturing, said plantlets are produced either:

- a) on a sterile explant of said phytopharmaceutical plant grown on an induction medium comprising at least one plant growth regulator having cytokinin activity, or
- b) grown from a sterile seed, or
- c) seedling in culture.

[47] 46. (Amended) The method according to claim [46] 45, wherein said at one plant growth regulator having cytokinin activity is selected from the group consisting of thidiazuron (TDZ, *N*-phenyl-*N'*-(1,2,3-thiadiazol-yl)urea), benzylaminopurine (BAP), zeatin, CPPU (N-(2-chloro-4pyridyl)-N(-phenyl urea) and 2-*I*-P (N6-(2-isopentenyl) adenine or 6-gamma, gamma-dimethylallylamino purine).

[48] 47. (Amended) A phytopharmaceutical plant prepared by the method of [any one claims 1 to 4, or 45 to 47] claim 1 and comprising an elevated level of said additive of interest when compared to a plant grown in the absence of said additive of interest.

[49] 48. (Amended) A method for the *in vitro* micropropagation involving *de novo* shoot formation of non-meristematic tissue of a phytopharmaceutical plant comprising:

- a) culturing a steril explant of said phytopharmaceutical plant on an induction medium comprising one or more plant growth regulators having cytokinin activity, to form regenerated tissue; and
- b) transferring said regenerated tissue to a basal medium and culturing to form plantlets.